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Use Patterns of a State Health Care Price Transparency Web Site: What Do Patients Shop For?

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Abstract

To help people shop for lower cost providers, several states have created their own price transparency Web sites or passed legislation mandating health plans provide such information. New Hampshire's HealthCost Web site is on the forefront of such initiatives. Despite the growing interest in price transparency, little is known about such efforts, including how often these tools are used and for what reason. We examined the use of New Hampshire HealthCost over a 3-year period. Approximately 1% of the state's residents used the Web site, and the most common searches were for outpatient visits, magnetic resonance imaging (MRI) or computed tomography (CT) scans, and emergency department visits. The results provide a cautionary note on the level of potential interest among consumers in this information but may guide others on practically what are the most "shop-able" services for patients.

Keywords

price transparency, price shopping, New Hampshire HealthCost, utilization, Web site

Introduction

In an effort to encourage patient consumerism, a multitude of price transparency initiatives have been introduced in the United States.¹ The hope is that patients will use the cost information to choose low-cost providers, thereby decreasing health care spending.² We know little about such tools, including how often they are used and for what types of services. To answer these questions, we examined use patterns of the New Hampshire HealthCost Web site. We chose this initiative because it is one of the oldest and among the most user-friendly and comprehensive.³

Methods

Established in 2007, the Web site provides the negotiated payment and out-of-pocket costs information for 42 commonly used services. Users select whether they are uninsured or their insurer. Providers within a pre-specified, user-selected distance from the user's zip code are ranked in descending order by out-of-pocket costs.

We partnered with State of New Hampshire (NH) and received access to their Google Analytics-derived Web site usage patterns for a 3-year period, January 2011 to December 2013. We limited our analyses to visitors with an NH Internet Protocol (IP) address who made at least one search. We measured total visitors and unique visitors over 3 years. Unique visitor is defined by a given IP address and a tracking

"cookie" on the computer. We determined which services were searched during the visit. Multiple queries of the same service in a search were counted once.

Results

A total of 15 180 visitors to the Web site made 19 237 visits over 3 years. Average visit length was 3.37 minutes. On average, 495 unique visits occurred each month, and the monthly rate has grown slowly (Figure 1).

Of the user searches, 41% were by the uninsured and 59% were by the insured. The three most common groups of services accounted for more than 50% of searches—outpatient visits (22%), magnetic resonance imaging (MRI) or computed tomography (CT) (18%), and emergency department visits (12%) (Table 1). Other common search terms were colonoscopy, obstetric care, and orthopedic surgery. There was significant price variation across providers for these services. Compared with providers at the 10th percentile, prices

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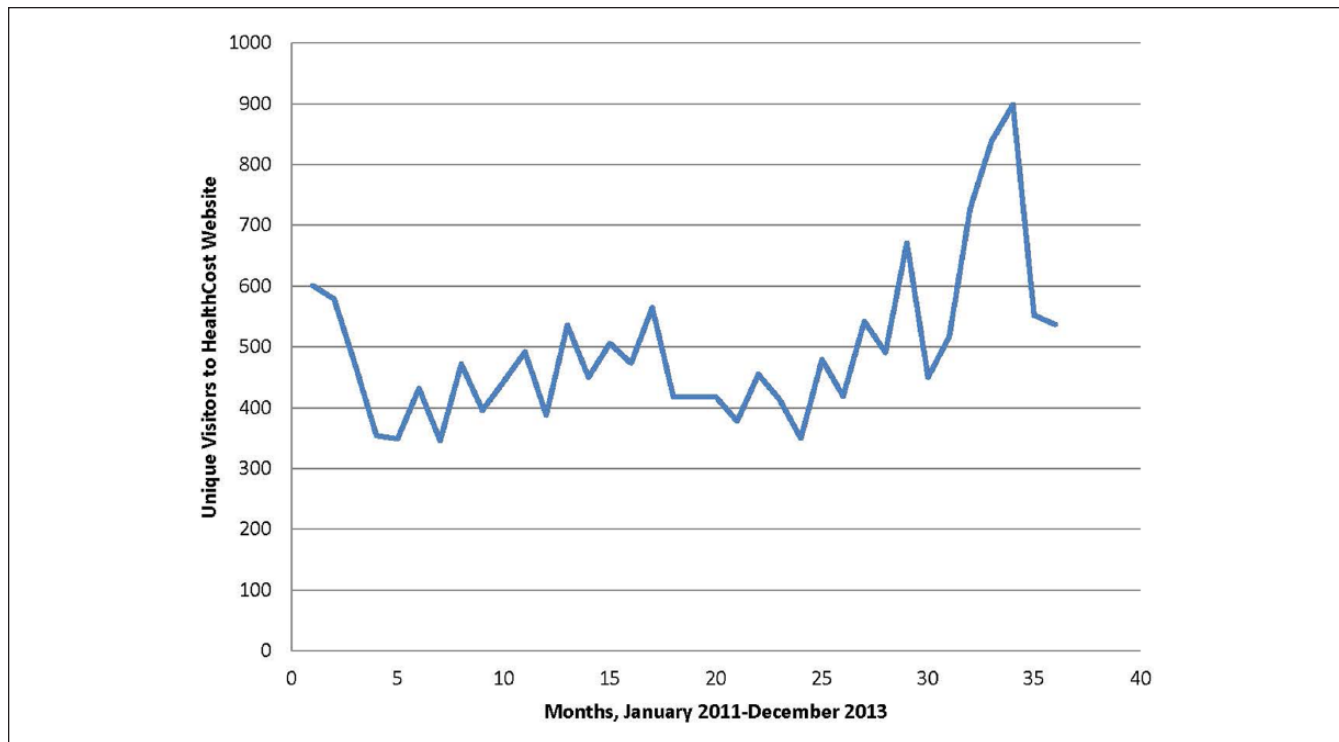


Figure 1. Monthly number of unique visitor of price transparency Web site.

Table 1. Use Patterns of the New Hampshire HealthCost Price Transparency Web Site From January 2011 Through December 2013.

Queries by category of service ^a	Unique pageviews from 2011 to 2013 (N = 30 581)		Price range of illustrative service for uninsured patient in that category across state in 2011		
	No.	%	Illustrative example of service in category	Range of prices across providers (\$) (10th percentile, 90th percentile)	% difference between 90th vs 10th percentile
Outpatient Office Visit	6858	22	Basic Office Visit, 18-49 years old	62, 116	87
MRI-CT	5394	18	MRI-Knee	1614, 2592	61
Emergency Room Visit	3740	12	Emergency Room Visit	217, 977	350
Other Radiology— Mammogram, Ultrasound, Bone Density	3200	10	Mammogram	327, 537	64
Colonoscopy	2538	8	Colonoscopy	2364, 4023	70
Plain Film X-Ray	2133	7	Chest X-Ray	390, 643	65
Orthopedic Surgery	1784	6	Arthroscopic Knee Surgery	7564, 12 498	65
Obstetric Care	1536	5	Vaginal Birth and New Baby	8224, 14 426	75
Hernia Repair	847	3	Hernia Repair	5162, 11 929	131
Cholecystectomy	774	3	Cholecystectomy	10 404, 17 228	66
Tonsillectomy	523	2	Tonsillectomy With Adenoidectomy	5139, 9685	88
Breast Biopsy	473	2	Breast Biopsy	3582, 10 112	182
Kidney Stone Removal	438	1	Kidney Stone Removal	8520, 21 085	147
Dermatologic Problem	343	1	Destruction of Skin Lesion	428, 911	113

Note. Web site was updated in June of 2014. Currently not all outpatient visits and procedures can be queried. The full list of queries will be re-introduced in several months. MRI = magnetic resonance imaging; CT = computed tomography.

^aThe services are grouped into categories. Individual queries are more detailed (e.g., Head CT with and without contrast).

for providers at the 90th percentile were 61% to 350% higher, across a set of illustrative services (Table 1)

Conclusions

While slowly growing, overall use of the HealthCost Web site remains low. Approximately 1% of the state's population visited the site over the 3 years. Given the observed price variation and the many state residents who pay for a large fraction of care out of pocket, one might expect it to be higher. In 2011, 18% were in a high-deductible health plan and 11% were uninsured.⁴ The low use is likely driven by low awareness of the site and the fact that many health care services are not elective and therefore do not facilitate price shopping. Given this low use, it appears unlikely such a Web site will reduce costs by driving consumer choice.

For the small fraction of people who might use price transparency data, our results help us understand which services are most “shop-able.” These services may be targets for other consumer-directed initiatives such as reference pricing that encourage the use of lower cost providers. Given their typically elective nature, it is not surprising that radiology and office visits are commonly searched services. Notably, many searches were for an emergency room visit, which due to their emergent nature are not presumably well suited to shopping for care.

Key limitations of our analysis include limited information about user characteristics and whether use of the Web site affected user's choice of provider. Our estimate that approximately 1% of the population used the Web site looks at the entire population. The fraction of people receiving a

given service (eg, a brain MRI) who used the Web site might be higher than 1%. Also, our focus was on consumer use of the Web site. Price transparency may reduce costs through other mechanisms.³ For example, providers may reduce prices in response to negative public pressure from being an outlier. Overall, our results provide a cautionary note on the potential impact of price transparency as patient use of price data may be quite low.

Declaration of Conflicting Interests

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